

**AAAS/SSE STEM Volunteer Program** The objectives of the AAS/SSE program are to foster the development of STEM literacy and motivate students to pursue STEM careers. STEM volunteers provide assistance to their teachers, with the details developed jointly. They commit to attending their schools an average of one day a week for the school year. Volunteers who are retired spend a few hours each day; those still fully employed attend for one class a day. Contact: 202-326-6629 or <a href="mailto:sse@aaas.org">sse@aaas.org</a>, and include a brief bio, with city, county and state of residence. <a href="https://www.seniorscientist.org">www.seniorscientist.org</a>

Asian American LEAD is a youth development non-profit organization that promotes the well-being of Asian American youth and families through education, leadership development and community building. Founded in 1998, AALEAD supports under-served Asian American youth, families, and the Asian American community. AALEAD provides a holistic combination of educational programs, mentoring, family support, and leadership training. Currently, AALEAD serves the Asian American community in Washington, D.C. and the Wheaton and Silver Spring areas of Montgomery County, Maryland. Interested in volunteering? Check out our web site at <a href="www.aalead.org">www.aalead.org</a> or contact Tina Ngo at <a href="www.aalead.org">volunteer@aalead.org</a> (202) 884-0322 ext. 105.

**BEST Kids Mentoring Program** is contracted through District of Columbia's Child and Family Services Agency, and is a nonprofit looking for outstanding volunteers to mentor foster care youth aged 6-18 in the District of Columbia. BEST Kids supports one-on-one mentorship relationships, as well as monthly educational peer group activities, to increase teamwork, social and life skills, and responsible decision making. As a Mentor, you may become the only consistent and caring adult between the youth's foster care placements. Shape a future, change a life – become a mentor! Contact: **BestKids.org**, Nancy (202) 397-3272, mentor recruiter@bestkids.org

The Boy Scouts of America has designed a new STEM program called Nova, aimed at engaging youth in STEM related activities. Our local council is running STEM Explorer Posts at schools, STEM labs at Camp Snyder, and encouraging and assisting local units to promote STEM education. We serve over 50,000 youth in Maryland, DC, and Virginia. Contact: <a href="mailto:stem@ncacbsa.org">stem@ncacbsa.org</a>

**CLEAN** stands for the Climate Literacy and Energy Awareness Network, which builds student educational resources. CLEAN is led by scientists and educators at TERC, the Cooperative Institute for Research in Environmental Science (CIRES) at the University of Colorado, NOAA, and the Science Education Resource Center (SERC) at Carleton College. It supports educators in many contexts -including formal and informal settings - in teaching and learning about climate and energy topics. Contact: Tamara Shapiro Ledley, <a href="mailto:tamara\_ledley@terc.edu">tamara\_ledley@terc.edu</a>, 617-873-9658

College Tribe is African-American men mentoring African-American boys. The mentor relationship is enhanced with STEM activities. Our boys learn chess, video game design, First Lego League robotics, and computer engineering (building a desktop computer)! Once a month, mentors and mentees explore DC with field trips to the Air and Space Museum, the Microsoft Store, and local college visits. Mentor or volunteer. Make an investment in the life of an African-American boy. Contact: Kanika Bynum, Mentor and Marketing Developer, <a href="mailto:kbynum@collegetribe.org">kbynum@collegetribe.org</a>, 202-563-3420

**CyberPatriot** is the National Youth Cyber Education Program created to inspire students toward careers in cybersecurity or other science, technology, engineering, and mathematics (STEM) disciplines critical to our nation's



future. The program, conceived by the Air Force Association, features the National Youth Cyber Defense Competition for high school and middle school students, CyberCamps, and an Elementary School Education Program. Contact: http://www.uscyberpatriot.org/

**Department of Energy** STEM volunteer opportunities include the STEM Mentoring Program, the National Science Bowl, Office of Human Capital recruitment efforts, and our Energy Literacy resources. Contact: <a href="mailto:diversity@hq.doe.gov">diversity@hq.doe.gov</a>

**eCYBERMISSION**, part of the U.S. Army Educational Outreach Programs, is a free virtual STEM competition for grades 6-9. The volunteer program is seeking Virtual Judges to evaluate the students' projects online in the month of March. Anyone over the age of 18 with an interest in STEM can sign up to be a judge. Contact: Alexis, <a href="https://www.eCYBERMISSION.com">www.eCYBERMISSION.com</a> 703-312-9226

**FIRST**'s mission is to show students of every age that science, technology, and problem-solving are not only fun and rewarding, but are proven paths to successful careers and a bright future for us all. We have a progression of 4 programs for k - 3 (Jr.FLL), 9 - 14 (FLL), FTC (H.S.) and FRC (H.S.). We host local, regional and international tournaments. All FIRST events are mainly supported by volunteers. We also look to agencies, corporations and education institutions to provide volunteers to mentor and coach teams. Contact: <a href="https://my.usfirst.org/FIRSTPortal/Login/VIMS">https://my.usfirst.org/FIRSTPortal/Login/VIMS</a> login.aspx

Frederick County Public Schools are looking for volunteers to share their expertise in STEM fields and inspire our students to enter STEM professions. There are many opportunities to encourage, inform and engage our students. Some of them include: guest speaking, judging of STEM competitions, mentoring, hands-on-activities in the classroom, job shadowing, webinars, presenting at Career Days or STEM Fairs, and support for our After-School Enrichment groups. Contact: http://www.fcps.org/stem or email kim.day@fcps.org or erin.landsman@fcps.org

**Future Next** is based in Waldorf, Maryland and provides year-round academic enrichment programs to the area's most vulnerable youth. We are a group of committed volunteers striving to provide high quality and engaging programs for academic success and personal development during after school and summer hours. Future Next has several opportunities for volunteers including tutoring, mentoring, classroom support, administrative support, and committee involvement. More information can be found at <a href="https://youtu.be/rtiYpvLgLE0">www.futurenext.org</a> or watch our recent volunteer video <a href="https://youtu.be/rtiYpvLgLE0">https://youtu.be/rtiYpvLgLE0</a> Contact: Nicole, <a href="https://youtu.be/rtiYpvLgLE0">volunteer@futurenext.org</a> or call 301-643-4259 after 5pm.

**Girls and STEM** is a grassroots effort led by a group of dedicated women to educate and engage underrepresented minority girls in STEM fields. We focus on middle and high school girls in urban areas. Our outreach includes all-day hands-on summits, finding mentors for the girls who attend our summits, STEM Clubs organized at partner schools, and tours to companies where the girls get a look at STEM in action. Contact: <a href="mailto:Girlsandstem@gmail.com">Girlsandstem@gmail.com</a>

**Great Minds in STEM** is at the forefront of developing and implementing innovative programs and partnerships focused on the continuous expansion of STEM education opportunities for our nation's underserved communities. Programs include: **Viva Technology™** national K-12 outreach programs- DC area programs to be conducted Spring of 2014! **HENAAC Scholars Program** - funding and database access opportunities to connect with students



maintaining a 3.0 GPA in STEM majors from accredited college and universities in the U.S. or territories of Hispanic origin. **2014 HENAAC Professional Awards Nominations**- Inquire about being a peer reviewer, must have a STEM professional background. **HENAAC Conference**- STEM recruiting and recognition conference will be held in New Orleans, LA in October 2-4, 2014. Contact: <a href="https://www.greatmindsinstem.org">www.greatmindsinstem.org</a>

**Higher Achievement** operates the Afterschool Academy for 25 weeks, from October to May. Scholars attend the program three days a week, from 3:30 p.m. to 7:45 p.m., and receive dinner, homework help, an elective, and intensive, small-group mentoring. During mentoring, scholars study three core subjects: math, literature, and a seminar, which often focuses on STEM. Contact: Alexis Davis, 202.375.7724, volunteer@higherachievement.org

Howard County Library System <u>HCLS – HITECH</u> - HiTech, HCLS' STEM education initiative for teens, teaches cutting-edge science, technology, engineering, and math (STEM) via project-based classes that include computer programming (Python and Javascript), 3D animation, nanotechnology, music/video production, e-books, game apps, cybersecurity, green energy, and robotics. Projects have included the design and build of <u>weather balloons</u>, robots, <u>quadrotor flight controllers</u>, hovercrafts, an e-book (titled "Chapters of Civility" — available as a <u>PDF</u> and from <u>iTunes</u> and <u>Google Play</u>), and two mobile games, *Escape From Detention* (downloaded 6,000 times from 30 countries across the globe) and coming in late December 2013, *Cyborg Glitch*. For volunteer information, please contact Mary Murbach at 410-313-7792.

Howard University Middle School of Mathematics and Science (MS)<sup>2</sup> is the site for the pilot for the Startup Middle School Program, which harnesses, develops, and promotes the talent that already exists within American middle school classrooms to create a new generation of innovative global technology leaders. (MS)<sup>2</sup> is a "High-Performing" LEA/Charter school, at the forefront of preparing students from underrepresented backgrounds for career and entrepreneurship opportunities in STEM disciplines especially disruptive technologies. Contact: startupmiddleschool@gmail.com

**Kid Power** inspires youth leadership by promoting academic advancement, physical and emotional wellness, and positive civic engagement in underserved communities throughout the District of Columbia. The organization is currently seeking volunteers from the professions relating to STEM education. Typically, volunteers working with Kid Power youth will tutor individual students or small groups in math and science, lead a discussion that shares the experiences of working in the field and the qualifications for obtaining a STEM related job, or help facilitate experiments or explorations of knowledge in the field. Contact: grant@kidpowerdc.org

**Let's GO Boys and Girls** partners with Washington area charter schools and youth organizations to deliver fun, hands-on STEM education activities. We meet the need by attracting students project based robotics, science/engineering, and math activities. Through these STEM activities, we increase STEM awareness, sharpen critical thinking and problem solving skills, develop character, and inspire & support students to enter and persevere in the country's STEM education pipeline. We are recruiting teams of STEM professionals to enrich LET'S GO curriculum with their practical knowledge. Programs occur in and after school for grades kindergarten through middle school. Volunteers are needed for weekly sessions, and for our guest speakers series. Contact: <a href="https://www.letsgoboysandgirls.com">www.letsgoboysandgirls.com</a>



**MAGIC** The Mid-Atlantic Girls Collaborative brings together organizations throughout Delaware, Maryland, Virginia, and Washington, DC that are committed to informing and motivating girls to pursue careers in STEM. Led by the Women in Engineering Program at the University of Maryland, leaders from industry, academia and philanthropic organizations are working together to ensure that girls and young women are effectively served in STEM. Contact: http://www.ngcproject.org/collaborative/mid-atlantic-girls-collaborative-magic-project

Montgomery County Public Schools CONNECTION RESOURCE BANK (MCPS) is a community engagement program, utilizing a database of volunteers willing to share their expertise, information about current research, occupations and real world experiences with students. This program supports and enriches the MCPS curriculum, including STEM topics. Role model volunteerism and connecting with students truly helps make the classroom come alive. Please visit the MCPS table to learn more about current volunteering opportunities. Volunteers can register online to become presenters, judges, consultants, mentors, tutors, shadow day and/or field trip hosts.

www.montgomeryschoolsmd.org/departments/crb Contact: Gail Woolf, Partnership Manager,
Gail S Woolf@mcpsmd.org; 301-279-3100 (main) 301-517-5066 (direct)

National Girls Collaborative Project brings together organizations throughout the US that are committed to informing and encouraging girls to pursue careers in science, technology, engineering, and mathematics (STEM). Project activities are designed to facilitate connections between organizations to maximize access to shared resources, strengthen the capacity of organizations by disseminating research-based exemplary practices, and leverage a network of girl-serving programs to create the tipping point for gender equity in STEM. Our online program directory is one of the ways in which we support the network by providing a platform where organizations and individuals can network, share resources, find programs, and collaborate on STEM-related projects. Contact: NGCP and connect with local organizations in our program directory by visiting: <a href="http://www.ngcproject.org/">http://www.ngcproject.org/</a>.

**Real World Design** is a free annual high school competition run by a public-private partnership with the goal of sustainably increasing the STEM workforce. Teams of secondary school students design a plane, with \$1 million in professional engineering software and access to professional mentors and a goal of earning a slot in the national competition. In 2014, the building challenge is focused on designing unmanned aircraft systems to support precision agriculture. Volunteers will help guide students and teachers through this challenge. Contact: <a href="mailto:rkcoppola@outlook.com">rkcoppola@outlook.com</a>

**ReSET** places STEM volunteers in DC area elementary schools to present hands-on science learning, to spark enthusiasm for science and math learning. ReSET volunteers lead programs involving six sessions of about one hour each with the same teacher and class of students during a semester, followed by a field trip to a science-oriented site. ReSET is also active in pre-Kindergarten Centers. We have about 80 volunteers in 32 area schools. An orientation program is provided for new volunteers, and classroom and field trip expenses are reimbursed. Contact: John Meagher at 703-250-0236 or reset@resetonline.org

**SciStarter** is a citizen science hotspot where people find opportunities to participate in formal and informal research projects in need of their help. More than 700 curated, searchable projects are featured on SciStarter with more added every day. SciStarter helps project organizers recruit volunteers through partnerships with DISCOVER



Magazine, the National Science Teachers Association, Public Library of Science, WHYY, Science Cheerleader, Pop Warner and more. Whatever your interest, there's a citizen science project in need of your help. Volunteer to join a project or to help underrepresented groups participate in citizen science projects featured on SciStarter. Contact: <a href="http://www.scistarter.com">http://www.scistarter.com</a>

**Smithsonian Science Education Center** Volunteers at the Smithsonian Science Education Center play an essential role in our inquiry-based science education curriculum, our educational reform programs, our science teacher professional development programs, and our educational forums. Contact: www.ssec.si.edu

Saint Ann School in Arlington, VA recognizes that STEM subjects have become keys to student success in the 21st Century. Accordingly, Saint Ann has recently chosen to make STEM a greater priority at the school. As part of this effort, the school has a committee to enhance the STEM educational opportunities for K-8 students, especially through extracurricular activities such as STEM clubs, competitions, field trips, summer camps, assemblies, etc. Contact: pparfomak@comcast.net

**The Fishing School** (TFS)'s mission is to provide a safe haven and academic support to underserved youth and their families in Washington, D.C. Through afterschool and summer programming, TFS works with elementary and middle school students to increase academic performance, school success, and life skills. Our innovative program approach uses hands-on STEAM-based activities to ensure that every young person receives a quality education and cultural experiences beyond school hours. Contact: Ciara Myers, Volunteer Program Associate 202-399-3618 ext. 27, <a href="mailto:cmyers@fishingschool.org">cmyers@fishingschool.org</a>

**United States Patent and Trademark Office** The Office of Education and Outreach uses volunteers to assist with various educational activities, STEM events and competitions that are held on our main campus in Alexandria, VA. The USPTO provides educational activities for students, educators, and young inventors and innovators of all ages.Contact: <a href="mailto:education@uspto.gov">education@uspto.gov</a>

**Washington Exec** works with local school districts (FCPS, ACPS, DCPS, MCPS) to help place volunteers who work for area-companies and federal agencies. We are a connector for STEM stakeholders in our region, within the nonprofit, industry and government sectors. At the STEM Symposium on March 8<sup>th</sup> 2014 in Herndon, Virginia, professionals will have the opportunity to share their insights with students, inspire students to pursue STEM, and gauge the STEM proficiency of their prospective pipeline. The conference is free and is a way for us to continue the process of matching area-nonprofit programs and volunteers to local school districts needs. Contact: www.stemsymposium.com

**YWCA National Capital Area** is dedicated to eliminating racism, empowering women and promoting peace, justice, freedom and dignity for all. We provide women and their families with the necessary programs that foster independence, economic stability and overall well-being. Our goal is to ensure that the majority of women and girls of color in high need communities across the national capital area have the resources and support necessary to achieve personal, educational and professional success. Our STEM efforts spread across the organization, covering a range of programs. There are sessions educating girls, ages 6-17, as part of our EMPOWERgirlz mentoring



program, as well as guest speakers on the possibilities of a STEM career for our Adult Education students. Contact: Charis A. Goff, <a href="mailto:cgoff@ywcanca.org">cgoff@ywcanca.org</a>, <a href="mailto:202-626-0707">202-626-0707</a>